

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018014**Date Inspected:** 27-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	An Qing Xing		
Inspected CWI report:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A

CWI Present:	Yes	No	
Rod Oven in Use:	Yes	No	N/A
Weld Procedures Followed:	Yes	No	N/A
Verified Joint Fit-up:	Yes	No	N/A
Approved WPS:	Yes	No	N/A
Delayed / Cancelled:	Yes	No	N/A
Component:	OBG COMPONENT		

Bridge No: 34-0006**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Subhasis Bera was present during the times noted above for observations relative to the work being performed.

In process Inspection

Outside Yard

This QA Inspector observed the following work in progress:

SMAW in the 4G position for the OBG segment 11BW to 11CW, weld No.OBW11B-009.The welder is identified as #040656. ZPMC QC is identified as Mr. Zhou Peng. The welding variables recorded by QC appear to comply with WPS-B-P-2214-B-U2-FCM-1.

SMAW in the 4G position for the OBG segment 11BE to 11CE, weld No.OBE11B-009.The welder is identified as #057333. ZPMC QC is identified as Mr. Wang li Yang. The welding variables recorded by QC appear to comply with WPS-B-P-2214-B-U2-FCM-1.

SMAW in the 3G position for the OBG segment 11BW to 11CW, weld No.DP693-001-21.The welder is identified as #040611. ZPMC QC is identified as Mr. Shi Lei. The welding variables recorded by QC appear to comply with WPS-B-T-2313-B-U3b.

SMAW in the 3G position for the OBG segment 11BW to 11CW, weld No.DP679-001-19.The welder is identified as #046704. ZPMC QC is identified as Mr. Shi Lei. The welding variables recorded by QC appear to comply with

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WPS-B-T-2313-B-U3b.

Bay#9

This QA Inspector observed the following work in progress:

FCAW in the 3G position for the OBG service platform, weld No.SP8-B-001-001. The welder is identified as #059443. ZPMC QC is identified as Mr. Chen Shigang. The welding variables recorded by QC appear to comply with WPS-B-T-2233-B-U2-F.

FCAW in the 3G position for the OBG service platform, weld No.SP4-B-001-002. The welder is identified as #059443. ZPMC QC is identified as Mr. Chen Shigang. The welding variables recorded by QC appear to comply with WPS-B-T-2233-B-U2-F.

Ultrasonic Testing (UT) for 11AE to 11BE

This QA Inspector performed Ultrasonic testing (UT) 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The members are identified as OBG 11AE to 11BE "T"-rib and I-rib splice weld joints.

The welds designation reviewed are as follows:

DP205-001-020
EP155-001-014
SP699-001-033
SP554-001-054
SP594-001-044
SP634-001-054
BP132-001-024
SP380-001-048
SP353-001-050
SP326-001-061
SP714-001-032
EP170-001-014
DP718-001-019

During the Quality Assurance Ultrasonic Testing (UT) review of welds located on Orthotropic Box Girder (OBG) Segment 11AE to 11BE splice joint, this Quality Assurance Inspector (QA) discovered the following issues Two (2) longitudinal linear Class "A" rejectable indications measuring approximately 20 and 25mm in length. The welds are identified as BP186-001-026 and BP078-001-020 respectively. Material thickness is 10mm. The depth of the indications are approximately 6 and 8mm respectively. The indication db ratings are +7 and +9 respectively.

The welds are Complete Joint Penetration (CJP) butt joints, joining bottom plate T-ribs on 11AE to bottom plate T-ribs on 11BE. The welds are not designated as Seismic Performance Critical Material (Non SPCM). The indications are clearly marked near the welds. The Y distance for weld joint BP186-001-026 is 35 mm from bottom cope hole. The Y distance for weld joint BP78-001-020 is 45 mm from bottom cope hole. The segments

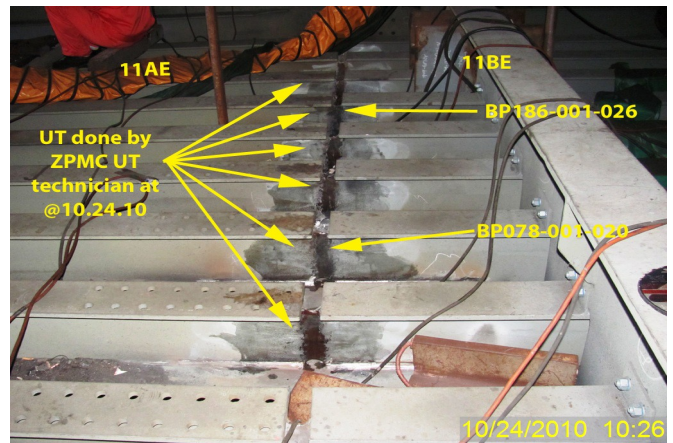
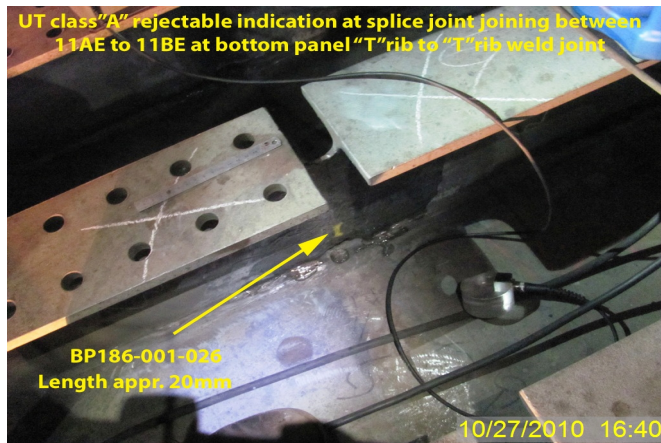
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are located in the OBG Trial Assembly area. The Notice of Witness Inspection (NWIT) No. is 007134. The indications are located within an area previously tested and accepted by ZPMC Quality Control (QC) personnel. Per the contract documents, ZPMC's QC personnel are required to perform 25% UT inspection of these welds. The indications location details, see the attached Photos (The first photo, dated 10/24/10, is included in this incident report for the purpose of confirming that ZPMC QC was previously observed by this QA, performing Ultrasonic Testing (UT) on the welds addressed in this report)

The QA inspector generated an incident report on this date.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No relevant conversations

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

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Inspected By: Bera,Subhasis

Quality Assurance Inspector

Reviewed By: McClendon,Timothy

QA Reviewer